

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

LG. PHILIPS LCD CO., LTD.,	)	
	)	
Plaintiff,	)	C.A. No. 05-292 (JJF)
	)	
v.	)	
	)	
TATUNG COMPANY;	)	
TATUNG COMPANY OF AMERICA,	)	
INC.;	)	
CHUNGHWA PICTURE TUBES, LTD.;	)	
AND VIEWSONIC CORPORATION,	)	
	)	
Defendants.	)	

DEFENDANTS' REPLY BRIEF IN SUPPORT OF THEIR  
PROPOSED CLAIM CONSTRUCTIONS

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## TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES .....	iii
I. INTRODUCTION .....	1
II. THE '002 PATENT CLAIM CONSTRUCTION .....	1
A. LPL's Construction on "Resistance" Is Indefinite and Lacks Evidentiary Support .....	1
B. LPL Does Not Provide Any Evidentiary Support for Its Assertion that "Scribe Line" Means "Cutting Line" .....	3
C. "Removing Said Outer Ring and Row and Column Interconnections" Requires a Clear Interpretation.....	3
D. "Pickup Pad" and "Corner Pad" Should Be Construed According to Their Definitions Dictated by the Specification .....	4
E. The "Outer" and "Inner" Guard Rings Denote Relative Rather Than Absolute Positions .....	5
F. CPT's Constructions on the Remaining Disputed Terms of the '002 Patent are Appropriate .....	6
1. "Interconnecting Substantially All of Said Row Lines to One Another and Substantially All of Said Column Lines to One Another" .....	6
2. "Shunt Switching Element" .....	7
3. "Electrostatic Discharge" .....	8
4. "Aligning Scribe Lines with Said Corner Pad for Removing Said Outer Guard Ring and Row and Column Intersections" .....	8
5. "Coupled to Said Interconnected Row and Column Lines via a Resistance" .....	9
G. Claim 18 Is Indefinite .....	9
III. CLAIM CONSTRUCTION FOR THE '121 PATENT.....	9

A.	LPL’s Construction of “Tape Carrier Package” is Not Supported By the Intrinsic Record .....	9
B.	LPL’s Construction of “Bending Part” is Not Supported by the Intrinsic Evidence .....	11
C.	LPL Offers No Support for Its Construction of “Bent Position” .....	12
D.	LPL Inserts Functional Limitations Into the Definition of “Dummy Bending Part” .....	14
E.	The Intrinsic Evidence Supports CPT’s Construction of “Not folded” .....	15
F.	CPT’s Construction of “On the Pad Part” Has Its Ordinary Meaning as Used in the Patent .....	16
G.	LPL’s Construction of “Input Pad Part” and “Output Pad Part” Lacks Evidentiary Support.....	17
H.	LPL Provides No Evidentiary Support for Its Construction of “pad part extending from the integrated circuit chip” .....	18
I.	The Remaining Disputed Terms of the ‘121 Patent Are Indefinite; Alternatively They Should Be Narrowly Construed According to CPT’s Proposed Construction.....	18
IV.	CONCLUSION.....	19

## TABLE OF AUTHORITIES

### CASES

<i>Amazon.com, Inc. v. Barnesandnoble.com, Inc.</i> , 239 F.3d 1343 (Fed. Cir. 2001).....	2
<i>Dentsply Int'l, Inc. v. Kerr Mfg. Co.</i> , 42 F. Supp. 2d 385 (D. Del. 1999) .....	1, 13, 17
<i>Ecolab, Inc. v. Envirochem., Inc.</i> , 264 F.3d 1358 (Fed. Cir. 2001).....	14
<i>Ferguson Beauregard/Logic Controls v. Mega Sys., L.L.C.</i> , 350 F.3d 1327 (Fed. Cir. 2003).....	13
<i>Markman v. Westview Instruments</i> , 52 F.3d 967 (Fed. Cir. 1995) .....	11, 13
<i>Microstrategy Inc. v. Bus. Objects Americas</i> , No. 03-1124, 2006 U.S. Dist. LEXIS 2136, at *29-30 (D. Del. Jan. 23, 2006) .....	9
<i>Mueller Sports Medicine, Inc. v. Core Prods. Int'l, Inc.</i> , No. 02-C-445, 2003 WL 23200261 at *4 (W.D. Wis. March 3, 2003) .....	12
<i>Phillips v. AWH Corporation</i> , 415 F.3d 1303 (Fed. Cir. 2005).....	passim
<i>Rockwell Tech., LLC v. Spectra-Physics Lasers, Inc.</i> , No. 00-589, 2002 WL 531555 at *3 (D. Del. March 26, 2002).....	1
<i>Schwing GmbH v. Putzmeister Aktiengesellschaft &amp; Putzmeister, Inc.</i> , 305 F.3d 1318 (Fed. Cir. 2002).....	14
<i>Trintec Indus., Inc. v. Top-U.S.A. Corp.</i> , 295 F.3d 1292 (Fed. Cir. 2002) .....	12
<i>Versa Corp. v. Ag-Bag Int'l, Ltd.</i> , 392 F.3d 1325 (Fed. Cir. 2004).....	17

## **I. INTRODUCTION**

LPL's brief provides scant support for most of its proposed constructions; consisting primarily of conclusory assertions. For example, LPL asserts that numerous claim terms should not be construed "because their meanings are clear to one of ordinary skill in the art..." but fails to identify any proposal for the "ordinary and customary meaning" that should be ascribed. *See* LPL Br. at 8. The "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention..." *Phillips v. AWH Corporation*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). LPL's omission of these "ordinary and customary meanings" smacks of an intent to sandbag CPT by withholding the proposed meanings until the claim construction hearing.

As LPL's proposed constructions lack sufficient support they should not be adopted. *See Dentsply Int'l, Inc. v. Kerr Mfg. Co.*, 42 F. Supp. 2d 385, 405 (D. Del. 1999) (declining to adopt a party's claim construction because it had not presented evidentiary support for its position). Nor should LPL's support come in its reply brief. *See* Local Rule 7.1.3(c) (2) ("The party filing the opening brief shall not reserve material for the reply brief which should have been included in a full and fair opening brief."); *Rockwell Tech., LLC v. Spectra-Physics Lasers, Inc.*, No. 00-589, 2002 WL 531555 at \*3 (D. Del. March 26, 2002).

## **II. THE '002 PATENT CLAIM CONSTRUCTION**

### **A. LPL's Construction on "Resistance" Is Indefinite and Lacks Evidentiary Support**

The '002 patent does not use "resistance" consistent with its ordinary meaning of a physical property or characteristic; rather, the patent uses "resistance" to mean a circuit

component. CPT Br. at 9-10. LPL does not dispute this. Instead, LPL offers support for its interpretation of “resistance” based only on the physical property meaning of the word. LPL Br. at 13 (“it is well-known to one of ordinary skill in the art that ‘resistance’ is an *intrinsic characteristic* of materials and devices”). (Emphasis added.)

LPL’s construction is overbroad and indefinite. As LPL admits, “all circuit components, regardless of whether the component is a resistor, diode, or transistor, have the characteristic of resistance.” LPL Br. at 13. Thus, any circuit component can “cause a voltage drop during current flow.” *See also* Howard Decl. ¶ 23. As such, LPL’s proposal erases any *objective* criteria for the “resistance” limitation and improperly places the limitation solely on the *subjective intent* of the user. *See Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1353 (Fed. Cir. 2001) (“We are not prepared to assign a meaning to a patent claim that depends on the state of mind of the accused infringer.”).

The intrinsic evidence shows that “resistance” is for the purpose of *limiting current*, not to cause a voltage drop. CPT Br. at 12. Further, the specification and prosecution history, contrary to LPL’s assertion, clearly express that “resistance” is different from transistors and diodes. *Id.*, at 11.

In support, LPL cites, out of context, a portion of the specification describing a prior art transistor as having “resistivity.” LPL Br. at 14 (citing Ex. 1, 4:32-34). The internal resistivity of the transistor described addresses an undesirable shorting characteristic in the prior art and is unrelated to the “resistance” relevant to the outer guard ring at issue. Ignoring LPL’s distortion, the cited portion simply states a general law of physics that any material, including those used for transistors, has resistance or

“resistivity” and sheds no light on whether the inventor’s use of “resistance” in connection with outer guard ring includes switching elements such as transistors.

**B. LPL Does Not Provide Any Evidentiary Support for Its Assertion that “Scribe Line” Means “Cutting Line”**

LPL construes “scribe line” to mean “cutting line based on reference marks.” LPL Br. at 25. No support, intrinsic or otherwise, exists for this definition. *Id.* Nor is any dictionary definition or expert declaration given to support the assertion that “scribe line” means “cutting line.” *Id.*

“Scribe” is undefined by the specification and therefore is to be accorded its ordinary meaning. The dictionary defines “scribe” as to “mark” with a sharp pointed tool. *See* Ex. 6; CPT Br. at 17. No basis exists to impose on “scribe” the meaning of “cutting.” In the LCD industry, the word “scribe” is used exactly as it is defined in the dictionary. Howard Decl. ¶ 26. LPL in essence equates one use of “scribe” (*i.e.*, marking for the purpose of fracturing) to the general meaning of the term, thus unduly limiting the construction of “scribe line.”

Furthermore, LPL’s definition of “scribe line” requires a cutting line “based on reference marks.” This is incorrect. The scribing process described in the specification requires alignment with the corner pads. *See, e.g.*, Ex. 1, Fig. 7 and Col. 8:11-14. No justification exists for importing the alignment process into the definition of “scribe line.” The phrase “based on reference marks” defines where the scribe line should be located, but not what it constitutes.

**C. “Removing Said Outer Ring and Row and Column Interconnections” Requires a Clear Interpretation**

The word “removing” here means removing a part or component from an electronic circuit. One of ordinary skill in the art would have understood the plain

meaning of the word in this context to include physical removal of the part from the circuit or the breaking of its connection to the circuit. Howard Decl. ¶ 23. This is how the word is used in the '002 specification. *See* Ex. 1, 8:12-16 (“... the scribe lines **204** and **206**, which are utilized to *disconnect the source and gate jumpers* and the guard ring **200**....”) (Emphasis added.).

LPL requires “physically disconnecting said guard ring and row and column interconnections.” This interpretation is fatally ambiguous. First, this construction can call for the physical removal of “said guard ring,” which is incorrect as discussed above. Second, it is not clear from what structure the “outer guard ring” is physically disconnected. In contrast, CPT defines the term to include three distinct sub-limitations, *i.e.*, electrically disconnecting (1) the interconnections between rows, (2) the interconnections between columns, and (3) the outer guard ring from the rows and columns.

**D. “Pickup Pad” and “Corner Pad” Should Be Construed According to Their Definitions Dictated by the Specification**

Both “pickup pad” and “corner pad” are terms coined by the patentee, and are not generally used in the LCD industry. Howard Decl. ¶¶ 27-28. In this situation, one of ordinary skill in the art would have understood the meaning of these phrases based on the descriptions provided by the specification.

LPL claims that “pickup pad ‘picks up’ the voltage between the back plane and front plane.” LPL Br. at 15. The intrinsic record fails to support this assertion and LPL fails to explain what voltage is “picked up” from the front plane, and for what purpose.

LPL’s proposed construction of “corner pad,” as “a reference mark for cutting” is equally erroneous. LPL bases its definition on claim language stating that, “aligning



scribe lines with said corner pad for removing said outer guard ring ....” LPL Br. at 24, citing Ex. 1, 9:32-33. This requires “scribe lines” to be cutting lines. Since support for LPL’s contention that “scribe lines” are cutting lines is absent, there is no support for LPL’s assertion that “corner pad” is a reference mark for cutting.

LPL challenges CPT’s “corner pad” definition because the pad is not located “at a corner of the outer guard ring” because the claim language requires it to be “on at least one corner of the *display*.” LPL Br. at 24. This argument is nonsensical. Locating on a corner of the outer ring is entirely consistent with locating on the corner of the display.

LPL further contends that the corner pad is not electrically connected with the outer ring, “but rather is formed, and ‘align[ed] [with] scribe lines ... for *removing* said outer guard ring.’” (Emphasis in original.) LPL Br. at 24. LPL ignores the intrinsic evidence. The specification describes the connection between the outer ring and the corner pad. *See* Ex. 1, 8:8-11 (“A corner pad **208** is connected to each other corner pad ... by respective outer conductive lines **210** and **212** of the guard ring **200**.”). LPL’s argument is illogical since the two features of the corner pad (*i.e.*, electrical connection to the outer ring and alignment with scribe lines) are not mutually exclusive.

**E. The “Outer” and “Inner” Guard Rings Denote Relative Rather Than Absolute Positions**

CPT’s proposed constructions of these two terms are supported by the specification, CPT Br. at 8-9, 13-14, and are consistent with the plain meaning of the comparative words “outer” and “inner.” In fact, the terms “outer” and “inner” as used in the claims serve only as labels to distinguish the two rings from each other in terms of their relative positions to each other.

Moreover, electrical connection between two parts does not in any way suggest their spatial relationship to each other. Nor does LPL suggest this. For example, because the outer ring is connected to the pads does not require the ring to be located near the pads, let alone outside the pads. Thus the only support for the word “outer” is outer to the inner guard ring.

CPT does not dispute that the inner and outer rings can be open or closed rings. But CPT does dispute LPL’s contention that guard rings cannot “prevent” ESD but only protect the TFT from ESD. “Preventing” is a form of protection. The specification uses both terms. *See, e.g.*, Ex. 1, 7:14-18, 8:1-2 “[t]o *prevent* a large electrostatic potential discharging through one of the transistors...an internal ESD guard ring...is formed around the pixels....” and “[t]he ESD *preventive* structure can also include an outer ESD guard ring.”). (Emphasis added.) Clearly, prevention is the “protection” provided.

**F. CPT’s Constructions on the Remaining Disputed Terms of the ‘002 Patent are Appropriate**

**1. “Interconnecting Substantially All of Said Row Lines to One Another and Substantially All of Said Column Lines to One Another”**

LPL objects to CPT’s definition of “interconnecting” as “electrically interconnecting with conductors.” LPL prefers “shorting” as the ordinary meaning of the word “interconnecting” because “shorted” is used in the specification in conjunction with the word “interconnected.” The specification, however, does not define either word. More importantly, the specification uses the term “shorted” in contexts other than “interconnected” and therefore a definition is required. For example, the specification uses the term “short” to describe an undesirable result during the manufacture of a prior art transistor where an electrostatic discharge occurs when a high static electric potential

is coupled between a pair of gate lines and sources lines, resulting in a “short” through the insulator. Ex. 1, 4:46-60. LPL provides no explanation as to how the row and column lines could be interconnected other than “electrically connected with conductors.” Certainly CPT’s construction is supported and provides certainty to the claims’ meaning.

Additionally, LPL’s definition reads the term “substantially all” out of the claims. The specification, *e.g.*, Ex. 1, 6:29-32, suggests that an objective of the patent’s teaching to one of ordinary skill in the art is the interconnection of *all* of the row and column lines (“[w]ith the respective subpixels pairs of row and column bus lines interconnected, [sic] however, an open in a bus line will at most cause one subpixel to be inoperative.”).

With respect to the separate treatment of row and column lines, as CPT states in its opening brief, two distinctive sub-elements are addressed in the specification:

- (1) “Interconnecting substantially all of said row lines to one another, and
- (2) “interconnecting ... substantially all of said column lines to one another.”

## **2. “Shunt Switching Element”**

LPL construes this term as “parallel switching element.” LPL Br. at 15. The term “parallel” is not described in the intrinsic evidence and LPL leaves “switching element” otherwise undefined. Simply interpreting “shunt” to mean “parallel” without providing any definition for “switching element” is insufficient. CPT Br. at 15-16. Although LPL disagrees with CPT’s construction for “switching element,” LPL declines to give an alternative definition.

A “switching element,” as the name implies, is a component that can switch between two or more states, including transistors and diodes. CPT Br. at 15. A transistor can switch between on and off states, as shown by the specification. Ex. 1, 7:37-39 (“the

transistor 146 will turn on ...”), 7:65-68. (“The low value ... does not turn on the transistors 194 and 196.”). In fact, a transistor is a typical electronic switching element having a conductive pathway that can be turned on or off. Howard Decl. ¶ 8.

### 3. “Electrostatic Discharge”

LPL argues that the term should not be construed because it is a “straightforward term universally understood in the art,” yet again declines to state what is understood. Without giving a proposed definition, LPL argues against CPT’s construction based on a distortion of CPT’s definition. “Build-up” does not intrinsically mean “slow.” There can be a rapid built-up of static electricity, and a “flow” of charges occurs whenever there is a charge movement, fast or slow. There is no intrinsic requirement for “flow of electrical current” to exclude a rapid charge movement as LPL suggests.

### 4. “Aligning Scribe Lines with Said Corner Pad for Removing Said Outer Guard Ring and Row and Column Intersections”

LPL’s argument completely ignores the lack of antecedent basis for the phrase “said ... intersections.” A resolution is required for the indefiniteness of the element. Otherwise, claim 7 is invalid. CPT Br. at 17.

While insisting that no interpretation is required, LPL still proposes, without support, that “aligning” means “adjusting.” “Aligning,” however, should mean “arranging in a line,” as shown by the specification. Ex. 1, Fig. 7 (showing the scribe line is arranged in a line with an edge of a corner pad); *see also* the illustration in CPT Br. Fig. 7A. This usage conforms precisely to the ordinary dictionary definition of “align,” *i.e.*, “to arrange in a line.” Ex. 16. “Aligning” should be given its ordinary meaning of “arranging in a line,” consistent with the inventor’s use of the term.

**5. “Coupled to Said Interconnected Row and Column Lines via a Resistance”**

CPT’s interpretation of “coupled” as “linked” is based on the dictionary definition of this term and is consistent with the intrinsic evidence. LPL suggests that “coupled” should mean “electrically connected.” LPL Br. at 23. LPL fails to provide any intrinsic or extrinsic evidence to support this construction.

LPL objects to CPT’s definition of the term on the ground that CPT’s definition distinguishes between “couple” and “interconnect.” *Id.* The claim language itself, however, supports this distinction, where “couple” is always used to convey a meaning of linking through a device, while “interconnect” is always used to mean connecting with a conductor line. *Cf.* Ex. 1, 9:1-2 (“interconnecting ... row lines to one another”), 9: 6-7 (“coupled ... via a resistance”), 9:17 (“pickup pad coupled ... via a shunt switching element”), 9:36-37 (“coupled ... via shunt switching elements”).

**G. Claim 18 Is Indefinite**

LPL is silent on claim 18’s indefiniteness. Claim 18 is not the usual typographical error that one of ordinary skill in the art would know how to fix. Claim 18 is open to multiple interpretations, based solely upon speculation as to the inventor’s intent. CPT Br. at 18-19. Claim 18, therefore, is beyond salvage and should be declared invalid for indefiniteness. *See Microstrategy Inc. v. Bus. Objects Americas*, No. 03-1124, 2006 U.S. Dist. LEXIS 2136, at \*29-30 (D. Del. Jan. 23, 2006).

**III. CLAIM CONSTRUCTION FOR THE ‘121 PATENT**

**A. LPL’s Construction of “Tape Carrier Package” is Not Supported By the Intrinsic Record**

LPL argues that the term for “tape carrier package” (TCP) represents the plain and ordinary meaning and does not require construction. LPL relies on a single cite in

the specification as the sole evidence for its construction that a TCP is *any* “apparatus to connect an integrated circuit chip to the liquid crystal panel and a printed circuit board.” LPL’s construction is untenable in light of the patent specification. LPL ignores the description in the specification that defines a TCP as having a base film, adhesive layer and metal layer. CPT Br. at 21-23. The plain meaning of a claim term is determined through the eyes of one of ordinary skill in the art when viewed in context of the written description and the prosecution history. *Phillips*, 415 F.3d at 1313-14.

LPL’s incomplete citation to the specification at column 2, lines 1-3 betrays its proposed construction of TCP. The preceding sentence of the passage cited by LPL clearly refers to a bending-type TCP as shown in Figure 1A of the patent. Three lines further down from LPL’s quotation, the patent unequivocally states that the TCP referred to in LPL’s quote is Figures 2 and 3. Figure 3 has an *adhesive 25* coated on a *base film 24* and a lead part *26 [metal layer]* adhered therein. Ex. 7, 2:4-7. Moreover, Figure 2 is described in the patent as a “plain [sic] view showing the *structure* of the tape carrier package in Fig. 1A.” Ex. 7, 4:29-30 (emphasis added). Figure 3 is “a sectional view of the tape carrier package taken along a line A-A' in Figure 2.” Figure 3 clearly shows a base film, adhesive layer and metal layer, supporting CPT’s construction. CPT Br. at 19. Referring to Figure 1A, the patent also describes the TCP having these same layers. Ex. 7, 2:5-7. The figures speak louder than words. Common sense and the intrinsic evidence reveal that LPL’s attempt to define “tape carrier package” as covering every type of interconnecting device connecting a D-IC to the LCD and PCB ignores the specification’s use of the term and stretches the term beyond its proper scope.

CPT's construction is consistent with how one skilled in the art would have interpreted this term. Other methods exist for connecting a D-IC to the LCD and PCB as one skilled in the art is aware. CPT Br. at 22. LPL's construction enlarges the scope of the claims to cover devices not described in or supported by the specification and obliterates the important public notice function served by the specification and the claims. *Markman v. Westview Instruments*, 52 F.3d 967, 986 (Fed. Cir. 1995).

**B. LPL's Construction of "Bending Part" is Not Supported by the Intrinsic Evidence**

LPL agrees with CPT that "bending part" is at a location "where a portion of the base film is removed." LPL Br. at 26. The parties, however, disagree on whether that location must also be where the "TCP is to be folded." The specification and prosecution history fail to justify LPL's construction that the term bending part is merely "bendable" – meaning that it does not need to be bent at all. To the contrary, the intrinsic record requires the *bending part* to be located so as to allow the PCB to *be folded* to the rear of the LCD *by bending* the TCP. CPT Br. at 26-27. LPL admits as much saying, "The TCP of the '121 patent has at least one *bending part* which is a bendable part of the TCP where the base film is removed to enable the tape carrier package *to bend*." LPL Br. at 7. (Emphasis added.)

Throughout the intrinsic record, when the term bending part is used, it refers to its location as being either where the TCP is folded or bent. CPT Br. at 25-27. LPL incorrectly argues that the terms are distinctly different when used in the context of the patent. Not so. LPL offers no support for this proposition, and the specification clearly contradicts LPL's contention, stating that the bending part is located where the TCP is folded. For example, "at least one *bending part* in which the base film is at a portion

where the tape carrier package *is folded* is removed...” Ex. 7, 3:54-56, 3:66-4:11. Similarly, the prosecution history also teaches that the bending part is at a position where the TCP *is folded*. CPT Br. at 27.

LPL points out that claim 1 recites a bending part located “at a bent position” and, by contrast in the same claim, a dummy bending part is located “where the tape carrier package is not folded.” From this, LPL argues that “bent” and “folded” cannot have the same meaning because they are different words. Of course, the correct comparison is between “bent” and “*not* folded” as opposites. However, in support, LPL cites several inapposite cases. For example, LPL cites *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1296 (Fed. Cir. 2002), where the court found that two different claims had different scopes because one claim required “creating” a graphic while the other required “creating or providing” the graphic. In contrast, the claim at issue concerns generally synonymous words used in the same claim to describe different elements of the claimed device. Similarly, none of the other cases cited by LPL concern synonyms used in the same claim. LPL therefore provides no valid reason for the Court to assign different meanings to “bent” and “folded.” See *Mueller Sports Medicine, Inc. v. Core Prods. Int’l, Inc.*, No. 02-C-445, 2003 WL 23200261 at \*4 (W.D. Wis. March 3, 2003) (“When the intrinsic evidence provides no support for construing two very similar words as having very different meanings, the doctrine of claim differentiation drops out of the equation.”).

### **C. LPL Offers No Support for Its Construction of “Bent Position”**

LPL contends that this term does not require construction because its meaning is plain on its face, but offers no support as to how the plain and ordinary meaning of “bent position” leads to its proposed construction – “a position that is not flat.” LPL Br. at 34. LPL’s position has significant problems. Words of patent claims are to be given their



plain and ordinary meaning, and the words of the claims must be considered in context and examined through the viewing glass of a person skilled in the art. *Phillips*, 415 F.3d at 1312-14. The use of the words in the context of the written description and the skilled artisan's customary use in the relevant art is what accurately reflects both the 'ordinary' and 'customary' meaning of the terms in a patent's claims. *Ferguson Beauregard/Logic Controls v. Mega Sys., L.L.C.*, 350 F.3d 1327, 1338 (Fed. Cir. 2003) (citation omitted).

LPL construes this term without consulting the specification for the proper context. Under LPL's construction, any amount of bending, including "flexed," would be covered. This expands the scope of the claims beyond the patent's written description and violates the public notice function of the patent specification. *Markman*, 52 F.3d at 986.

Further, LPL gives no dictionary definition, no citation to the patent specification or prosecution history, nor does it give any other support confirming that one of ordinary skill would interpret this claim term in this manner. *Denstply Int'l, Inc.*, 42 F. Supp. at 405 (declining to adopt a party's claim construction because it had not presented evidentiary support for its position). Again, LPL argues that the terms "bent" and "folded" have different meanings, ignoring the intrinsic record where the terms are used interchangeably. For example, when distinguishing the prior art, the patentees referred to the bending parts of *Tagusa* and *Tajima* as being "folded." CPT Br. at 26-27.

CPT bases its construction on the specification which describes the bent position to be bending to such a degree as to allow the PCB to be *folded* to the rear side of a LCD by bending the TCP. Ex. 7, 1:57-2:3, CPT Br. at 27-28. This bent position is clearly shown in Figure 1A of the '121 patent and is consistent with how one skilled in the art

would have understood this term when reading the '121 patent. CPT Br. at 27-28; Holmes Decl. ¶¶ 43-45. Expert testimony is useful to the Court to determine what a person of ordinary skill would understand claim terms to mean in this context. *Phillips* at 1317-19. Accordingly, CPT's proposed construction—location on the TCP where the TCP is folded—is the only logical construction given the clear support in the specification and prosecution history.

**D. LPL Inserts Functional Limitations Into the Definition of “Dummy Bending Part”**

CPT and LPL generally agree that the “dummy bending part” is an area of the TCP “where a portion of the base film has been removed.” CPT disagrees with LPL's attempt to read functional limitations into the claim term to require the dummy bending part to be “bendable,” but yet have a “function other than bending.” LPL Br. at 27-28. There is no support for these functional limitations in the intrinsic record and LPL cites to none. Under LPL's construction, a bending part can even be a *dummy* bending part as long as it has a function other than bending. This construction is illogical and not supported in the specification.

Moreover, LPL's construction violates basic tenets of claim construction. Where a claim uses structural language, it is generally improper to interpret it as having functional requirements. *Schwing GmbH v. Putzmeister Aktiengesellschaft & Putzmeister, Inc.*, 305 F.3d 1318, 1324 (Fed. Cir. 2002); *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001). To justify its construction, LPL relies on the claims and the specification's recitations that the dummy bending part has various functions, such as reducing “thermal expansion force and thermal contraction force . . .” or is “capable of reducing a brightness difference in the [LCD] screen.” LPL Br. at 28.

From these recitations, LPL improperly concludes that this necessitates the inclusion of its proposed functional language. Not only is this improper, but the claims already recite a functional requirement for the dummy bending part—"for reducing a thermal expansion force and thermal contraction force . . .," *See, e.g.*, Ex. 7, claims 1, 2, 5, 8 and 14.

CPT's definition is supported by the intrinsic record where the term is consistently defined as being formed by removing the base film between the pad part and the D-IC. Ex. 7, Abstract, 3:46-49, 6:2-5. Arguments made during the prosecution when distinguishing over the prior art on the basis that the dummy bending part existed at an area where the TCP is *not folded* provides further support. CPT Br. at 29-30. Moreover, original claims 1 and 5 were amended to include the specific limitation that the dummy bending part exists in an area where the TCP is *not folded*. CPT's construction that "dummy bending part" means "an area on the TCP where a portion of the base film is removed between either the input or output pad and the D-IC where the TCP is not folded" is also consistent with how one skilled in the art would interpret this term in light of the specification and prosecution history. Holmes Decl. ¶¶ 33-38. Extrinsic evidence in the form of expert testimony, as here, is useful when it is used to confirm the understanding of one skilled in the art. *Phillips*, 415 F.3d at 1318.

**E. The Intrinsic Evidence Supports CPT's Construction of "Not folded"**

LPL's proposed construction of the term "not folded" is "not making a fold." LPL Br. at 35. Because this proposed construction relies on the disputed term itself to define the meaning, this construction is ambiguous. In fact, it could mean any position on the TCP, including areas that are bent, which LPL contends is different than the term

fold. Thus, LPL's proposed construction offers no clarity to this term, nor does its citation to the claims help support its construction.

The parties agree that the term "not folded" is used to distinguish the location of a "bending part" from a "dummy" bending part. However, the parties disagree as to where that location would be as viewed in the context of the intrinsic record. When this term is viewed in proper context of the intrinsic record, the patentees were clearly referring to the area where the dummy bending part is located, namely the area of the TCP between the pad parts and the bending [folded] part. That area, as depicted in Figures 9 and 11 for example, is substantially flat. One skilled in the art would have understood this term to be a distinct area separate from the area where the TCP is folded to allow the PCB to be placed on the rear side of the LCD. CPT Br. at 31, Holmes Decl. ¶¶ 46-47.

**F. CPT's Construction of "On the Pad Part" Has Its Ordinary Meaning as Used in the Patent**

LPL mistakenly contends that CPT's proposed definition is "*aligned directly* on top of the pad part" when in fact CPT's proposal is "on top of the output pad part." CPT's construction is consistent with the ordinary dictionary definition of the term "on" meaning "on top of." CPT Br. at 32. Dictionaries can be employed to assist the court in determining the meaning of a particular term to those of skill in the art. *Phillips*, 415 F.3d at 1318. Conversely, LPL proposes a definition that broadens the term "on" to mean "at or along, or in proximity to," which obviously does not comport with its ordinary meaning. LPL's only support for its broad definition is based on the specification's statement that the location of the dummy bending part can be located "between an output pad part and the D-IC in parallel." LPL Br. at 36. This does not change the ordinary meaning of "on."

The word “proximity” as used by LPL means “being near or next; closeness.” Ex. 17. Under LPL’s definition the term “on,” found only in claim 15, would have the same meaning as “close to” the pad part as used in the other claims. Clearly, that is not how the term is used in the claims. There is a presumption that, when different words are used in separate claims, there is a difference in meaning and scope. *Versa Corp. v. Ag-Bag Int’l, Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004). Thus, CPT’s proposed construction for “on the pad part” is in harmony with the term’s ordinary meaning and use in the claims.

**G. LPL’s Construction of “Input Pad Part” and “Output Pad Part” Lacks Evidentiary Support**

LPL challenges CPT’s constructions of the terms “input pad part” and “output pad part” by contending these terms have a plain and ordinary meaning to one of ordinary skill in the art, yet offers nothing in support of their position. LPL Br. at 33-35. As such, LPL’s construction should be rejected. *Dentsply Int’l, Inc.*, 42 F. Supp. at 405.

In stark contrast, CPT’s definition is fully supported and is taken directly from the specification virtually *verbatim* which defines “input pad part” as an area of the TCP “that is *connected to the output signal wiring of a PCB.*” Ex. 7, 2:12-15, 4:16-17, 5:11-13, 5:38-40, 5:65-67. (Emphasis added.) The same is true for CPT’s definition of “output pad part” where the specification defines this term as the area of the TCP that “*connects to the pads formed on the edge of the lower glass substrate of the liquid crystal display.*” Ex. 7, 3:53-54, 5:17-22, 5:44-50, 6:9-10. (Emphasis added.) These definitions are consistent with how one of ordinary skill in the art would have understood these terms in context of the specification. Holmes Decl. ¶¶ 27-32, 63-66. Thus, CPT’s proposed definitions are well supported. LPL’s proposed constructions neglect the

teachings of the specification; rather, they replace it with their own definition, absent support, of “an interface between the integrated circuit chip and the liquid crystal panel.”

**H. LPL Provides No Evidentiary Support for Its Construction of “pad part extending from the integrated circuit chip”**

This claim phrase requires no further construction because “output pad part” and “input pad part” are defined above in section 7. LPL, on the other hand, contends this claim phrase should be construed out of context to mean “an interface electrically connected to the integrated circuit chip.” LPL Br. at 30. LPL again substitutes the term “interface” for “pad part” in its construction, which is found nowhere in the specification. Likewise, LPL contends the term “pad part” is well-known by those of ordinary skill in the art to be an “interface,” yet again fails to state the ordinary meaning.

CPT’s and LPL’s constructions differ on the basis that when this phrase is read in proper context, it must refer to the “pads located at the ends of the TCP” and not an “interface” as LPL claims. LPL’s definition covers a location anywhere between the integrated circuit chip and the liquid crystal panel. LPL supports its construction by referring to Fig. 11 of the patent, which offers LPL little support. LPL Br. at 30. This figure shows neither an electrical or physical connection between the input pad part and the D-IC. What is shown is the input pad part 51 is located at the area at the *end* of the TCP, precisely the definition proposed by CPT. CPT Br. at 24-25.

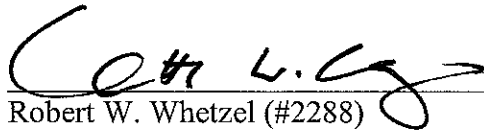
**I. The Remaining Disputed Terms of the ‘121 Patent Are Indefinite; Alternatively They Should Be Narrowly Construed According to CPT’s Proposed Construction**

The remaining three claim phrases regarding thermal expansion and contraction forces are indefinite because it is not possible to determine their scope and meaning based on a complete lack of support in the specification. *See* CPT Br. at 32-24. If construction

is required, CPT's definitions should be adopted because its definitions are more in accord with the specification and claim language. *Phillips*, 415 F.3d at 1315-16. The parties' constructions differ in that LPL is reading out of the definition the fact that the thermal expansion/contraction forces must necessarily result from thermal pressing of the *output pad part of the TCP onto the lower glass substrate of the LCD*. The specification clearly describes that the expansion/contraction forces are "generated at the time of thermal-pressing the pad onto the liquid crystal panel." Ex. 7, 4:13-16. LPL admits this in its Opening Brief where the background technology section states that these forces "generated at the time of *thermal-pressing the TCP to the liquid crystal panel* result in warping of the back plane." LPL Br. at 6. (Emphasis added.) One of ordinary skill would, thus, recognize that thermal pressing the input pad part would have no effect on the expansion/contraction forces generated on the output pad at the other end of the TCP. Thus, CPT's construction is clear and consistent with the specification.

#### IV. CONCLUSION

For the foregoing reasons, CPT's construction on all terms of the '002 patent should be adopted and claim 18 of the '002 patent declared indefinite. Additionally, CPT's construction on all terms of the '121 patent should be adopted or all the asserted claims of the '121 patent declared indefinite.



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